MORTALITY DATA AND RECOMMENDATIONS FROM MORTALITY REVIEW (APRIL – JUNE 2011)

The following issues were identified during mortality reviews completed during the fourth quarter of fiscal year 2011 (April-June 2011). While the data presented may pertain to comorbid conditions that are not attributable to the cause of death, the risk involved with these conditions warrant further examination. It is hoped that this communication will lead to an increased awareness of the issues discussed and that this knowledge will translate to individual and systemic actions intended to reduce recurrence.

This communication is not intended to provide specific medical recommendations; interested parties should seek further clarification from trained medical professionals.

Identified Issues

References

References include, but are not limited to:
IAC 460 Article 6-10-10 Quality Assurance and Quality Improvement System;
IAC 460 Article 6-14-4 Training;
IAC 460 Article 6-19-6 Monitoring of Services;
IAC 460 Article 6-25-2 Coordination of Health Care;
IAC 460 Article 6-25-3 Documentation of Health Care Services Received by an Individual;
IAC 460 Article 6-25-9 Health-Related Incident Management;
IAC 460 Article 6-25-10 Investigation of Death;
DDRS Policy: Incident Reporting and Management;
DDRS Policy: Personnel Records;
DDRS Policy: Requirements & Training of Direct Support Professional Staff.

Resources

Each person's primary care physician/specialist is another excellent resource for obtaining and developing plans for situations unique to them.

There are many relevant websites available. A small sample of these include:
http://www.rxlist.com/script/main/hp.asp
http://www.in.gov/fssa/ddrs/4066.htm
http://www.in.gov/fssa/ddrs/3948.htm

Post-Operative Supervision/Monitoring

There have been 11 deaths attributable to post-operative complications within the first 6-months of 2011. With a total of 12 post-operative deaths during the previous 12-months (Table 1), there appears to be a greater risk of future occurrence.

When there is surgery or a procedure performed, ensure the physician understands the person's living arrangements (e.g., 24-hour supervision, lives alone unsupervised, etc.) and clarify whether there is a need for increased supervision postoperatively and for how many days and/or shifts. Also, ensure there is an understanding of what is to be monitored (e.g., pulse, pulse oximetry, food intake, urine output, etc.) and when and who to contact if there are concerns.

Table 1. Number of Post-Operative Deaths Reviewed by Mortality Review Committee per Calendar Year.

Calendar Year Death Reviewed by Mortality Review Committee	2008	2009	2010	2011[a]
Number of Post-Operative Deaths	**19**	**13**	**12**	**11**

[a]2011 data represents deaths over a 6-month period (01/01/2011 – 06/30/2011).

Opportunities for post-operative complications continue to present themselves each time a person visits the ER or is hospitalized. For the average quarterly ER visits and hospitalizations please refer to Table 2.

Table 2. Average Quarterly Emergency Room Visits and Hospitalizations (for Medical Reasons) per Calendar Year.

	2008	2009	2010	2011
Emergency Room Visits	**2039**	**2023**	**2016**	**2184**
Hospitalizations	**682**	**617**	**608**	**670**

Dental Work/Oral Surgery and Therapeutic Diets/Dysphagia Diets

If a person is having dental work or oral surgery, ensure the dentist/oral surgeon is aware of any therapeutic diets/dysphagia diets prior to the procedure in order to ensure post-operative orders do not conflict with the requirements of the dysphagia diet. If the post-operative diet is in conflict with the dysphagia diet or dining plan, the speech-language pathologist (SLP) and ID team should meet to discuss the concerns to resolve the problem, and contact the dentist/oral surgeon when indicated. There should be documentation of the decision and communication with the dentist/oral surgeon outlining the steps taken for resolution of the concern. Any change in diet that was recommended by the SLP should be reviewed to determine if the change in diet/dining plan is acceptable. The dental procedure should not occur until a diet is ordered which is determined to be safe for the individual. Discussion should also include any change in positioning, adaptive equipment, or level of supervision/monitoring needed post-operatively at mealtime. For a person specifically returned to the home with pressure gauze to a bleeding site, there should be a flow sheet/log with frequent monitoring until the final gauze is removed, with time of final removal. If gauze is replaced, the time of replacement should be indicated.

Information Received From Medical/Dental Appointments/ER Visits/Hospitalizations

Following a medical appointment, a variety of written information is returned to the home, which could include prescriptions, treatment orders, follow-up appointment requests, need for lab work, need for monitoring, etc. The

staff person accompanying the person to the medical/dental appointment should ensure all documents are given to the appropriate person, usually a nurse or house manager/supervisor (as designated in the appropriate policy) in a timely manner. Agencies should ensure a system is in place to track who received the document, date and time of receipt, the name of the document/origin of document, and who provided the document. Staff training on this system, along with appropriate documentation of the training, should be completed. The nurse or the nurse delegate should be aware of any scheduled medical/dental appointments prior to the appointment occurring.

Fractured Ribs and Associated Risks

Reported fractures have been trending up over the past three quarters with 154 being reported during this most recent period (Table 3). Fractured ribs represent a heightened risk that requires urgent review by agency personnel. The pain causes splinting of the chest wall and the tendency of a person to not breathe deeply, but to remain as still as possible to reduce the discomfort. Pain medication can also blunt respiratory drive, and lead to shallow breathing and a reduced respiratory rate. Due to the tendency to splint the chest wall and reduced respiratory rate or reduced inspiratory volume, the risk of hypoxia and infection increases. Agency administration should ensure steps are taken to monitor during the critical time of pain associated with breathing, by use of frequent pulse oximetry readings, or close supervision with monitoring of respiratory status. The fractured rib(s) could be due to an underlying osteoporosis/osteopenia, and a DEXA scan should be requested if one was not completed prior to the fracture.

Table 3. Total Number of Reported Fractures (includes all fractures, not just ribs).

Description	2Q FY11	3Q FY11	4Q FY11
Number of Reported Fractures	**114**	**120**	**154**

Fall prevention programs are one strategy that can help to reduce the risk of a fracture. Prior to the updated DDRS Incident Reporting and Management Policy (effective 03/01/2011), falls were only reportable if they were associated with a significant injury, ER visit or hospitalization. With falls associated with any injury now classified as a reportable incident, this has resulted in a significant increase in the number and a more accurate representation of incidents in this area (Table 4).

Table 4. Total Number of Reported Falls with Injuries.

Description	2Q[b] FY11	3Q[b] FY11	4Q FY11
Number of Reported Falls with Injuries	**572**	**716**	**1277**

[b]Only included falls resulting in significant injury, ER visit or hospitalization.

Of the 1277 falls, 84 of the falls (6.6%) resulted in a fracture. Fifty-four (54) of the 84 falls resulting in a fracture were due to accidental reasons on the part of the person with some of the other reasons reported as peer aggression, sports activity, staff person, seizure-related, equipment/furnishings, and self-intentional.

If a fracture is reported, a checklist of questions/probes is shared with the Interdisciplinary Team (IDT). The checklist should be used by the team to address any identified variables that contributed to the fracture. The checklist is available on the BQIS website (https://secure.in.gov/fssa/files/Fracture_Checklist.pdf) and can be utilized as a proactive risk management and educational tool for providers.

Coumadin and Associated Risks

Coumadin is a blood thinner essential in the treatment of several conditions. The agency however needs to be aware of situations and take action when there is risk of an adverse outcome from blood thinners. A person on Coumadin with an unstable gait or history of falls is at great risk for serious bleeding due to trauma. This can be fatal at times.

A person on Coumadin with a fall history should have an aggressive fall prevention plan, including but not limited to, a review of increased supervision needs, a review of adaptive equipment, a review of bed rail use and bed alarm systems, a review of new medications or drug interactions that could lead to sedation and instability, a consideration of the need for a physical therapy and/or neurology consult for worsening gait or increased falling, a primary care physician (PCP) medical evaluation of any worsening or new instability in gait, worn footwear, environmental hazards, as well as a plan to ensure Coumadin clinic appointments or follow-up for blood tests are completed. Staff need to especially be aware when International normalized ratio (INR) levels (a measure of blood thinning) exceed the therapeutic range (2.0-3.5 common INR target for a person on Coumadin), indicating prolonged bleeding potential if injured. When elevated INR levels occur, the agency needs to ensure increased vigilance and supervision. It is especially important for individuals on Coumadin that every effort is made to eliminate falls and eliminate injury due to falls. Falls leading to head trauma should lead to thorough evaluation and close monitoring for both external bleeding of the face and scalp, as well as neurological exam for internal head injury (brain contusion/bleeding) with the potential need for an ER visit depending on the initial history and findings.

Person with Severe/Extensive Pica Behavior

Pica ingestion requiring more than first aid is a reportable event according to the updated DDRS Incident Reporting and Management Policy. During ~~the~~ 2011, participants have engaged in pica requiring treatment greater than first aid an average of 3.5 times per month.

When a person with a history of severe/extensive pica behavior goes to medical appointments, the ER and/or is admitted to the hospital, be sure staff in the medical office, ER, and/or hospital are aware of (and document) the pica behavior (and the types of items that have been ingested in the past) along with the preventive strategies. There are two primary reasons. If there are abdominal symptoms, then the work up may include ruling out an ingestion of an inedible. The second reason is to make the immediate environment free of items the person is known to ingest (e.g., gloves, tacks, etc.).

Including a pica diagnosis as part of the mortality data that is collected began for deaths reviewed by Mortality Review Committee since October 2009. While not listed as the cause of death, there have been 26 deaths for individuals diagnosed with pica over the past two years (Table 5).

Table 5. Number of Deceased People with Diagnosis of Pica

Year Death Reviewed by Mortality Review Committee	2009 (10/09 – 12/09)	2010	2011
Number of Deceased People with Diagnosis of Pica	**8**	**7**	**11**

The people with a pica diagnosis who have died did not have autopsies performed. The purpose of this bullet is to reinforce the importance of sharing a diagnosis of pica with people in locations other than just the residence (e.g., hospital, ER, medical office, etc.) along with implementing preventive strategies. If a person with a pica diagnosis dies, performing an autopsy to rule out any ingestion of a foreign object would be beneficial.

Recognizing and Responding to Changes in Health Status

Recognizing changes in health status and function is essential to the early detection of illness in the IDD population. The importance of this issue should be reflected in the day-to-day administration of care by the caregivers.

Before an employee begins working with a person receiving services, he/she should be trained on recognizing and responding to changes in health status. This training would include those changes that need to be reported, when and how to report them, and who to report them to. Just as important, is that the person who is notified of a person's change in health status, knows the next steps that should be taken to ensure timely and appropriate action.

In the event of a life-threatening event (e.g., choking, severe bleeding, stopped breathing, etc.), a **911 call should be made prior to calling the supervisor or on-call person.**

Individuals functioning in the severe and profound range of intellectual/developmental disability (IDD) have a greater number of medication complications (e.g., seizure disorders, gait disturbance, etc.) and subsequently a lower life expectancy than those in the mild and moderate range of IDD. It may be for these reasons that cancer (a more progressive condition) appears more associated with those that are higher functioning and live longer. For those functioning in the profound range of IDD (i.e., IQ score < 20) there appears greater risk of mortality associated with respiratory issue and sepsis (Table 6).

Twenty-seven percent (27%) of all sepsis deaths occurred in those with profound IDD. The mild and moderate IDD categories each had 24% of deaths attributed to sepsis along with 17% of deaths for people with severe IDD attributed to sepsis. Training of direct support staff on early health status changes that occur with sepsis may be life saving. Some examples include either fever or development of a low body temperature, generalized weakness, dizziness, rapid pulse, rapid breathing, low blood pressure, rapid onset of confusion, agitation. Resource material (recognizing and responding to changes in health status) is available at the websites noted in this communication. This topic should be taught to anyone working with a person with IDD.

TABLE 6. CAUSE OF DEATH PER LEVEL OF IDD - deaths reviewed by MRC 10/1/08 to 6/30/11
(Percentages calculated vertically).

Level of IDD	Total Number of Deaths	Cause of Death			
		Cardio-vascular	Respiratory	Cancer	Sepsis
Borderline	8%	11%	8%	13%	5%
Mild	28%	33%	21%	44%	24%
Moderate	19%	20%	16%	22%	24%
Severe	15%	13%	17%	8%	17%
Profound	27%	19%	32%	9%	27%
Unknown	3%	4%	6%	3%	2%
Total	1058	168	155	116	92

Training of staff to observe for and communicate early changes in health status may assist in reducing the deaths for those independent of IDD level. However, with the limited communication skills and increased medical conditions, providers need to be particularly cognizant of early changes for those in the severe and profound range of IDD. Additional strategies that should help staff identify early changes include training and good communication/documentation across shifts. Documentation can take many forms, the most common being progress notes and logs.

Resource material is available at:
http://www.in.gov/fssa/files/recognizing_change_in_status.pdf
http://www.in.gov/fssa/files/responding_to_change_in_status.pdf

Use of Psychotropic Medications

A number of cases reviewed by MRC were prescribed multiple psychotropic medications (i.e., those medications used for behavioral and psychiatric purposes). Prescribing patterns has been a concern given the risk of side effects such as respiratory distress, neuromuscular impact (e.g., involuntary abnormal movements such as tongue thrusting, lip smacking, movement of extremities), and abnormal gait which can lead to falls and fractures.

Researchers have estimated that over 50% of all prescriptions provided to people with an IDD living in the community are for psychoactive medication (Lott, McGregor, Engleman, et al., 2004). Within this study, Lott and colleagues found that

over 62% of those reviewed were given prescriptions for more than one psychoactive medication and 36% received three or more drugs.

The Medication Administration Record (MAR) and physician orders would include a diagnosis for each routine medication prescribed. If a person is prescribed three or more psychotropic medications for the same diagnosis, the provider agency should consider requesting a pharmacy review of medications from the pharmacy, which dispenses the medications to the home, with a focus on reviewing drug interactions, side effects, and possible alternative medication options. This could be used as a teaching tool for the staff in observing for side effects, and may be helpful guidance to the psychiatrist or primary care physician (PCP) prescribing psychotropic medication during the individual's office visit. Information regarding medications can be found at http://www.rxlist.com/script/main/hp.asp.

Location of Do Not Resuscitate (DNR)/Full Code Documents

All staff working with a person receiving services should have knowledge of where the documents regarding DNR status/full code status are located. A copy should be readily available to hand to EMS personnel upon arrival to the home. If there is a situation in which the person is taken to the hospital and/or ER by staff, a copy of the document(s) should be brought along with the transfer packet of information, as the ER/hospital will often request this information. It may be helpful for the house manager to periodically check that these documents are in place and a copy is available. During the person's annual meeting and/or periodic staff training sessions, it might also be helpful to remind staff of where these documents are located and that a copy should be provided to EMS/hospital staff.

Having discussions regarding available options and documenting end of life decisions is important. Agency administration should ensure support staff are aware of the DNR status of the consumers they are working with and the location of the written documentation. The DDRS policy regarding Advance Directives is available at http://www.in.gov/fssa/files/Advance_Directives.pdf.

Staff's Physical Ability to Perform Job Duties

Agencies should ensure that staff have the physical ability to perform job duties (e.g., lift, safely position a person correctly, perform the Heimlich maneuver, etc.). During the last three months, there have been two recent deaths where documentation suggests that staff were not physically capable of performing essential duties. This included situations where staff had some physical limitations associated with mobility (i.e., unable to quickly move to the ground to perform CPR) and also where the size of the person being supported resulted in a challenge to onsite staff (i.e., difficulty rolling a person over). Providers should assure sufficient staff resources to meet all emergency needs for those that are supported.

Cardio-Pulmonary Resuscitation (CPR)

Agencies need to ensure staff are current in CPR certification (not just First Aid) at all times without any gaps in certifications. It is recommended that all agencies (residential habilitation, day program, behavioral services, etc.) review their process/system to ensure compliance with this requirement. Mortality reviews have indicated instances in which staff were not current in CPR certification, do not perform CPR or need coaching to perform CPR should it be needed. During Compliance Evaluation and Review Tool (CERT) reviews conducted through 06/30/2011, 25 providers were identified to have staff without the proper or updated CPR certification.

As part of ongoing CPR skills performance, agency staff should consider having mock drills in the home under various circumstances (e.g., the need to move a person on the bed to the floor or place a bed board under the person) with staff performing the steps of CPR successfully, with a record of such drills. The DDRS policy relative to CPR requirements for staff is available at http://www.in.gov/fssa/files/Personnel_Records.pdf.

Internal Review of Death

Per DDRS Mortality Review policy, an internal review of a person's death should be completed regardless of the place of death (e.g., home, hospital). This policy can be found on the DDRS website at http://www.in.gov/fssa/ddrs/3340.htm. Relevant agency policies/procedures should be included as part of the mortality review packet.

Internal reviews of death should be completed in a timely manner (see Mortality Review Policy effective 5/30/11). Given that autopsy results can take months to receive, and there may be delays and obstacles in obtaining EMS and hospital records, a timely initial internal review according to the policy is expected. If information/reports remain outstanding, a list of outstanding documents and the last date(s) of contact can be included with the review. Upon receipt of the outstanding documents, a final report can be generated and forwarded.

Treatment Planning and Risk of Mortality

There are a number of tools that team members (e.g., providers, case managers, family members and other natural supports) can utilize to further secure a person's health and welfare (and consequently reduce mortality risk). While not directly associated with the cause of a death reviewed by MRC during this period, discussions related to communication and improved treatment planning were pervasive during reviews. What follows are some of the areas noted:

Individual Support Plan (ISP)

The information in the Individual Support Plan should reflect the person's current status. If there is a change of some kind (e.g., additional risk factors identified, a different technique to communicate, a change in person responsible for health care coordination, DNR status, change in method of intake, etc.), these changes need to be immediately communicated with the Case Manager to facilitate an update to the ISP. An example would be a person who had previously been on nectar thick liquids and the order was changed to honey thick liquids. If the documents used by staff and reviewed by others show a variety of thicknesses and it is not clear what the correct thickness should be at a given point in time (or when the change was made), the potential exists for the person to receive incorrectly thickened liquids.

Risk Plans

A risk plan is a written set of guidelines and instructions for everyone who is supporting a person in receive of services. While a team effort, providers are in the best position to observe changes to a person's status (e.g., falls, swallowing difficulties, etc.). When a risk issue (i.e., health or behavioral problems that can be harmful if not handled right) develops or changes at any time of the year, the provider should contact the Case Manager to initiate a team meeting. Once the risk plan(s) are updated, it is important that providers reference the date reviewed/revised on the plan to assure training and implementation of the correct plan(s).

Dining Plans

Dining plans, as well as any other risk plan, should be implemented in all settings (e.g., home, day program site, restaurants, church events, the family home, other special events, etc.). Without proper implementation, the risk of choking increases. During the 2011 fiscal year, there were 188 reported incidents of choking that required intervention (e.g., Heimlich) (Table 7). While the number of incidents appears fairly stable over time, there was a reduction in deaths due to asphyxiation (associated with food/pica/objects/medication) from 2009 to 2010 (reduction from 11 to 5). So far, there have been five of these deaths during 2011.

Table 7. Total Number of Reported Choking Incidents Requiring Intervention.

Description	1Q FY11	2Q FY11	3Q FY11	4Q FY11
Choking with Intervention	**45**	**49**	**51**	**43**

Providers should ensure all staff are trained to competency in implementing dining plans (e.g., correct textures and consistencies, adaptive equipment when applicable, etc.). The provider should have a clear, written protocol on who, when and how information regarding triggers is timely communicated in order to address the triggers. The provider should develop and implement a monitoring program to ensure that, (a) dining plans are

implemented correctly and revised as needed, and (b) all providers are aware of the individual specific needs outlined within each plan. This training requirement includes:

A provider shall train direct care staff in providing a healthy and safe environment for an individual, including how to … manage individual-specific treatments and interventions, including management of an individual's … diet and nutrition; swallowing difficulties (460 IAC 6-14-4 Training; DDRS Policy: Requirements & Training of Direct Support Professional Staff).

Documentation Standards

The statement "if it isn't documented, it didn't happen" is probably a familiar one to most people in this field. During examination of documents submitted for mortality review, it has been noted that documentation regarding the consistency of liquids (and foods) given is not as complete as it should be. For example, if a person is to receive nectar-thick liquid, the documentation should include the fact that the liquid given was thickened to nectar-thickness. Documentation should say "nectar-thick broth given" instead of just saying, "Broth given."

Documents should be dated (month, day and year) with the date they were created (and/or reviewed/revised). This would include risk plans. From 03/01/2011 through 06/30/2011, 25% of all people reviewed with the Comprehensive Review Tool (CST) received at least one citation related to documentation (e.g., Do the individual's staff document that they have provided services and supports in accordance with the person's support plan and the provider's policies and procedures? Does documentation show that the individual consistently received the supports and services indicated in their support plan?).

Part of any agency's training for support staff includes documentation standards. Some basic documentation requirements include not charting ahead of time (pre-charting). There have been two recent mortality reviews where this has been noted to have occurred. Entries in staff logs, staff notes, etc. should be dated (month, day and year) and should be signed by the person making the entry along with his/her title. The following additional strategies help to provide clarity: (a) Documentation should be objective, not subjective; (b) Documentation should be legible; (c) A legend should be available if abbreviations are used; and (d) Progress notes and transcribing of physician orders should include the time with either AM or PM or written in military time.

It is suggested that agency administration ensures appropriate policies/procedures address the above issues, train staff on these issues, and have a system to monitor for compliance.

Key Points from the Mortality Data Analysis

Through an exploration of mortality incidents reported from 10/1/08 through 6/30/11, we are able to identify patterns and associated recommendations.

Key Points from the Mortality Data Analysis

Key points by Age:

- Life expectancy and level of IDD are positively correlated. Approximately half of all deaths in the IDD population in those under 30 had profound IDD. From the third through the fifth decade, the profound IDD population continued to contribute a significant percentage of all deaths in the IDD population;
- For those under the age of 30, of the four causes of mortality that are tracked, respiratory illness was the most common cause of death. For the remainder of the decades at time of death, cardiovascular causes contributed a similar percentage or exceeded deaths due to respiratory illness;
- Sepsis was the cause of 6-11% of all deaths across all decades through the 80s;
- Dysphagia remained an important comorbid condition throughout the decades;
- Similarly, gastroesophageal reflux (GERD) was an important comorbid condition at each decade of life;

- In summary, at the time of death, dementia increased as the decades advanced, the prevalence of G-tubes, seizures, and sleep apnea decreased over the decades, and dysphagia and GERD remained relatively unchanged throughout the decades at the time of death (Table 8).

TABLE 8. VARIOUS HEALTH CATEGORIES PER DECADE OF LIFE - deaths reviewed by MRC 10/1/08 to 6/30/11
(Percentages calculated horizontally)

Decade	Total Number of Deaths	Various Health Categories								
		Dementia	G tube	Down's	Dysphagia	CVA	GERD	Hypothyroidism	Sleep Apnea	Seizures
<30	96	1%	42%	5%	25%	4%	31%	14%	13%	57%
30s	78	1%	32%	10%	35%	4%	41%	22%	13%	55%
40s	112	11%	29%	16%	36%	6%	37%	32%	13%	47%
50s	235	27%	20%	29%	42%	6%	43%	32%	8%	46%
60s	259	37%	21%	20%	39%	10%	42%	26%	7%	39%
70s	158	37%	15%	3%	35%	13%	43%	23%	4%	27%
80s	101	50%	15%	0%	41%	12%	44%	18%	2%	23%
90+	19	63%	5%	0%	37%	16%	26%	16%	0%	11%
Total	1058	28%	22%	15%	37%	8%	41%	25%	8%	41%

Key points by Level of IDD:

- In the borderline, mild, and moderate IDD population, cardiovascular disease caused the highest percentage of deaths (between 17 and 21%);
- In the severe and profound IDD population, the most significant cause was respiratory disease, representing 16-18% of the causes of death in this population;
- The peak decade of death for people with borderline, mild, moderate or severe IDD is the 60s. There appears to be a gradual rise to the peak and a more brisk drop off after the peak. A double peak (increased deaths) continues for people with profound IDD;
- The peak of deaths associated with a diagnosis of CVA (sixth decade) was slightly later than the peaks of the other comorbid conditions (Table 9).

TABLE 9. VARIOUS HEALTH CATEGORIES PER LEVEL OF IDD - deaths reviewed by MRC 10/1/08 to 6/30/11
(Percentages calculated horizontally)

Level of I/DD	Total Number of Deaths	Various Health Categories								
		Dementia	G tube	Down's	Dysphagia	CVA	GERD	Hypothyroidism	Sleep Apnea	Seizures
Borderline	85	26%	21%	1%	33%	7%	38%	26%	11%	22%
Mild	301	26%	11%	8%	26%	9%	37%	23%	9%	36%
Moderate	197	29%	13%	22%	31%	11%	42%	26%	8%	33%
Severe	159	40%	27%	28%	45%	10%	42%	28%	8%	47%
Profound	285	21%	39%	13%	51%	6%	46%	27%	6%	55%
Unknown	31	39%	26%	19%	32%	3%	35%	19%	3%	26%
Total	1058	28%	22%	15%	37%	8%	41%	25%	8%	41%

Taken together, Tables 8 and 9 capture the presence of these comorbid conditions for people of all IDD levels and age. With elevated risk that particular conditions may contribute to a decline in a person's health, providers may want to

incorporate additional training to facilitate the early identification of such a change (e.g., awareness that sleep apnea appears to impact our population).

Summary

A person's needs do not remain the same indefinitely, it is important for team members to have the knowledge to recognize the changes when they occur and to have the tools necessary to respond quickly and appropriately to reduce the risk.

References

Lott, I., MGregor, M., Engelman, L., Touchette, P., Tournay, A., Sandman, C., Gernandez, G., Plon, L., and Walsh, D. (2004). Longitudinal prescribing patterns for psychoactive medications in community-based individuals with developmental disabilities: Utilization of pharmacy records. *Journal of Intellectual Disability Research, 48 (6)*, 563-571.